Amendments to the Claims:

1. (currently amended) A sintered silicon nitride product, comprising from about 60 to 95 mole % ß-silicon nitride, [[and]] from about 1 to 8 mole % scandium oxide, from about 2.5 to 25 mole % silicon carbide, and from about 1 to 10 mole % scandium disilicate.

2 to 3. (canceled).

4. (original) The sintered silicon nitride product of claim 1, wherein said sintered silicon nitride product comprises from about 72 to 92 mole % ß-silicon nitride, from about 3 to 18 mole % silicon carbide, from about 1 to 4 mole % scandium disilicate, and from about 3 to 6 mole % scandium oxide.

5. (original) The sintered silicon nitride product of claim 1, wherein said sintered silicon nitride product has a fracture toughness, as measured by the indentation strength method at a 20 kg indentation load, in the range of from about 7.7 to 8.5 $MPa.m^{0.5}$.

6. (original) The sintered silicon nitride product of claim 1, wherein said sintered silicon nitride product has a 20-kg indentation fracture strength in the range of from about 330 to 370 MPa.

7. (original) The sintered silicon nitride product of claim 1, wherein said sintered silicon nitride product has an oxidation weight gain at a temperature of 1500°C in the range of from about 0.27 to 0.38 $mg.cm^{-2}$.

8. (original) A sintered silicon nitride product, comprising: not less than 50 mole % ß-silicon nitride, from about 0.1 to 30 mole % silicon carbide, from about 1 to 15 mole % scandium disilicate, and from about 1 to 10 mole % scandium oxide.

9. (original) The sintered silicon nitride product of claim 8, comprising from about 72 to 92 mole % ß-silicon nitride, from about 3 to 18 mole % silicon carbide, from about 1 to 4 mole % scandium disilicate, and from about 3 to 6 mole % scandium oxide.

10. (original) The sintered silicon nitride product of claim 8, wherein said sintered silicon nitride product has a sintered density of at least about 3.17 $g.cm^{-3}$.

11. (original) A sintered silicon nitride product, comprising:

ß-silicon nitride grains;

silicon carbide;

a grain boundary secondary phase of scandium oxide; and

a grain boundary secondary phase of scandium disilicate, wherein said ß-silicon nitride comprises from about 72 to 92 mole %, said silicon carbide comprises from about 3 to 18 mole %, said scandium oxide comprises from about 3 to 6 mole %, and said scandium disilicate comprises from about 1 to 4 mole %.

12. (original) A sintered silicon nitride product prepared by sintering a starting powder mix, said starting powder mix comprising silicon nitride in the range of from about 80 to 95 weight %, silicon carbide in the range of from about 0.25 to 10 weight %, and scandium oxide in the range of from about 5 to 12 weight %.

13. (original) The sintered silicon nitride product of claim 12, wherein said starting powder mix further comprises up to about 3 weight % added silicon dioxide powder.

14. (original) The sintered silicon nitride product of claim 13, wherein said starting powder mix has a silicon dioxide:scandium oxide molar ratio in the range of from about 0.4 to 1.

15. (original) A component formed from a sintered silicon nitride, said sintered silicon nitride comprising from about 60 to 95 mole % ß-silicon nitride, from about 2.5 to 25 mole % silicon carbide, from about 1 to 10 mole % scandium disilicate, and from about 1 to 8 mole % scandium oxide.

16. (original) The component of claim 15, wherein said component is a hot section component of a gas turbine engine.

17. (original) A method of preparing a sintered silicon nitride product, comprising:

a) providing a starting powder mix;

b) forming a green body from said starting powder mix; and

c) sintering said green body to form said sintered silicon nitride product, wherein said sintered silicon nitride product comprises from about 60 to 95 mole % silicon nitride, from about 2.5 to 25 mole % silicon carbide, from about 1 to 10 mole % scandium disilicate, and from about 1 to 8 mole % scandium oxide.

18. (original) The method of claim 17, wherein said step a) comprises providing said starting powder mix comprising silicon nitride in the range of from about 80 to 95 weight %, silicon carbide in the range of from about 0.25 to 10 weight %, and scandium oxide in the range of from about 5 to 12 weight %.

19. (original) The method of claim 17, wherein said starting powder mix further comprises added silicon dioxide powder in the range of from about 1 to 3 weight %.

20. (original) The method of claim 17, wherein said starting powder mix has a silicon dioxide:scandium oxide molar ratio in the range of from about 0.4 to 1.

21. (original) The method of claim 17, wherein said step b) comprises forming said green body by a process selected from the group consisting of isostatic dry pressing and slip casting.

22. (original) The method of claim 17, wherein said step c) comprises gas pressure sintering at a final pressure in the range of from about 900 to 1500 psi.

23. (original) The method of claim 17, wherein said step c) comprises gas pressure sintering at a temperature in the range of from about 1625 to 2025°C.

24. (original) The method of claim 17, wherein said step c) comprises a plurality of sintering stages.

25. (original) The method of claim 24, wherein said plurality of sintering stages are performed for a combined period in the range of from about 5 to 15 hours.

26. (original) The method of claim 17, wherein said step c) comprises a first, a second, a third, and a fourth sintering stage.

27. (original) The method of claim 26, wherein said fourth sintering stage comprises sintering under nitrogen at a first sintering pressure, and during said fourth sintering stage introducing argon to provide a second sintering pressure, said second sintering pressure higher than said first sintering pressure.

28. (original) The method of claim 26, wherein said fourth sintering stage comprises sintering at a final pressure in the range of from about 900 to 1500 psi and a temperature of at least 2000°C.

29. (original) A method of preparing a sintered silicon nitride product, comprising:

a) providing a starting powder mix, said starting powder mix comprising silicon nitride in the range of from about 80 to 95 weight %, silicon carbide in the range of from about 0.25 to 10 weight %, and scandium oxide in the range of from about 5 to 12 weight %;

b) forming a green body from said starting powder mix; and

c) sintering said green body to form said sintered silicon nitride product, wherein said step c) comprises gas pressure sintering and includes a plurality of sintering

stages, and wherein said sintered silicon nitride product comprises from about 60 to 95 mole % silicon nitride, from about 2.5 to 25 mole % silicon carbide, from about 1 to 10 mole % scandium disilicate, and from about 1 to 8 mole % scandium oxide, said sintered silicon nitride product having a fracture toughness in the range of from about 7.7 to 8.5 $MPa.m^{0.5}$.

30. (original) The method of claim 29, wherein said sintered silicon nitride product has a 20-kg indentation fracture strength in the range of from about 330 to 370 MPa.

31. (original) The method of claim 30, wherein said starting powder mix provided in said step a) has a silicon dioxide:scandium oxide molar ratio in the range of from about 0.4 to 1.